PAX GBG: A QUALITATIVE INQUIRY INTO POPULATION-LEVEL IMPLEMENTATION

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ABSTRACT

This study examines the experiences of participants who were part of a PAX Good Behavior Game implementation in Ireland. Teachers and principals detailed the process of adopting and implementing the universal preventive intervention into their schools and classrooms. They provided thoughts on training, implementation, and the impact of the intervention. Participants found the comprehensive training provided adequate instruction to begin implementation. They also found that support helped improve teachers practice with the intervention. Finally, they recommended the intervention, which dramatically reduced negative behaviours and increased positive behaviours, should be scaled up across the country based on the results of the pilot study.

KEYWORDS: PAX GBG, Good Behavior Game, Prevention.

INTRODUCTION:

The PAX Good Behavior Game (PAX GBG) is a universal preventive intervention that can be applied by schoolteachers in the classroom. PAX GBG is the commercially available intervention derived from the Good Behavior Game as it was developed at the University of Kansas in the 1960s (Barrish, Saunders, & Wolf, 1969). The intervention utilizes soft team competition among students to both set and adhere to agreed-upon standards of behaviour. Today, the intervention has been revised, developed, and augmented with a number of additional academic, behavioural health, mental health, and prevention strategies to increase the performance and health of children in every classroom. The outcomes for multiple cohorts of students have been tracked from the classroom all the way into adulthood to demonstrate the usefulness of the intervention as an academic tool and in building lifetime protective factors (Embry, 2002).

The proximal effects that children who have been exposed to PAX GBG demonstrate have been replicated in multiple randomised control trials. These include a 75% decrease in problematic behaviour from students (Embry, et al., 2010, Embry 2002). Students exposed to PAX GBG for at least one school year also demonstrate a decrease aggressive behaviour and depressive symptoms as well as decreased service use for lifetime mental, emotional, and behavioural disorders (Kellam, Rebok, Ialongo, & Mayer, 1994, Kellam, Ling, Merisca, Brown, & Ialongo, 1998, Kellam, Rebok, Mayer, Ialongo, & Kalodner, 1994). Improved behavioural performance also led to improved academic performance including significant increases in standardized test scores and decreases in identification rates for special education services (Fruth, 2014, Weis, Osborne, and Dean, 2015, Bradshaw, Zmuda, Kellam, & Ialongo, 2009).

The lasting effects and lifetime outcomes demonstrated by students exposed to PAX GBG include higher secondary school graduation rates as well as higher college entrance rates (Bradshaw, Zmuda, Kellam, & Ialongo, 2009). These students also demonstrate reductions in criminal activity into adulthood as well as reductions in tobacco, alcohol, and illicit drug use into adulthood (Kellam, et al., 2008, Petras, et al 2008, Kellam, et al., 2014, Furr-Holden, Ialongo, Anthony, Petras, & Kellam, 2004).

Ultimately, PAX GBG has shown to create a more productive classroom, but more importantly, embed skills and mindsets that last well into adulthood of the children exposed. By strengthening inhibition, extending self-regulation, and improving social emotional scaffolding, PAX GBG creates changes in electrical, neurochemical, neural connectivity, and epigenetic make-up; as it is the only classroom-based strategy shown to cause the expression of brain derived neurotrophic factor (BDNF) genes that serve as adaptive protections for young people through adulthood and into future generations (Musci, et al., 2014). BDNF has been found to be central in contextual learning and even protection from depression and other later onset neuropsychiatric disorders by increasing neural plasticity.

This goes a long way in explaining the transferability of PAX GBG as an evidence-based practice. PAX GBG has shown similar outcomes in numerous and varied environments across the world including inner-city and impoverished areas in the United States, rural and remote areas of Canada, as well as varied regions of Estonia, Sweden, and Ireland (Ialongo, et al., 1999, Jiang, Santos, Mayer, & Boyd, 2015, Streimann, et al., 2017, Ghaderi, Johansson, & Enbrink, 2017, O'Donnel, Morgan, Embry, O'Kelley, & Owens, 2016). Transferability is vital for implementing any intervention beyond a well-funded and supported pilot or efficacy trial. In a population-level implementation, elements of the intervention must allow for cultural connections that ensure adoption and dissemination with treatment integrity but also cultural responsiveness. The success of PAX GBG in these various regions shows that it can be embedded and executed by professionals and organizations within their ordinary daily operations.

METHODOLOGY:

Context:

This study was carried out in conjunction with the initial implementation and integration of PAX GBG into 13 schools in Ireland. The study was carried out independently of the schools and implementers and was facilitated by the Department of Public Health, Health Services Executive, and Dublin Mid-Leinster. The project was funded by the Department of Children and Youth Affairs and the research was commissioned by Northside Partnership (NSP) on behalf of Preparing for Life (PFL) in conjunction with the Midlands Area Partnership (MAP). For this project, teachers and principals of existing schools and classrooms were trained in PAX GBG. They then began implementing the programme into their daily routines with students while having this integration guided by PAX mentors. They provided classroom and school level support including feedback, troubleshooting, and modeling of strategies for teachers and principals. This inquiry sought to establish a narrative of the experiences of both teachers and principals in initiating and implementing PAX GBG and thus, had the following aims:

a) Capture the experiences and lessons learned by the Irish teachers and school principals who have implemented PAX GBG

b) Identify and highlight the successes of PAX GBG in Irish schools from the perspectives of students, teachers, principals, and the wider school communities

c) Identify implementation challenges for teachers, principals, and students from the perspectives of both principals and teachers and to recommend solutions to address these implementation challenges

d) Analyse the information gathered to inform an effective and efficient scaling up plan for PAX GBG in Irish schools

e) Prepare an informative report based on the information gathered from teachers and principals that will enable the further development and scaling up of PAX GBG

Research Design:

This qualitative study also called upon quantitative outcomes and support but generally relied on a qualitative inquiry utilizing a survey design. Survey designs allow "investigators to administer a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviors, or characteristics of the population" (Creswell, 2008, p. 388). In this study, the inquiries with the teachers utilized a questionnaire with open-ended questions that was developed to detail their experiences learning and implementing the programme. The inquiries with the school principals involved open-ended interviews to determine their experiences integrating the programme into their schools.

Participants:

There were two distinct participant groups in this study – teachers and principals. Both groups were recently trained in and utilizing PAX GBG in their schools and classrooms in cooperation with the funders and facilitators of the project. The target sample of teachers for this study was 120 teachers that were trained as a part of the project. Of those 120 teachers, 63 volunteered questionnaire responses for this study. The target sample for the principals included nine who had significant portions of their staffs trained as a part of this project. Of those nine principals, five volunteered interview responses for this study.

Instrumentation:

Two distinct instruments were created and utilized for this study. This included a questionnaire for use with the teachers and an interview script for use with the principals. The teacher questionnaire was created through a collaboration consisting of the PAXIS Institute, PAX GBG mentors, and a school principal. The questionnaire elicited demographic questions for the teachers as well as the students they serve. The focus of the instrument was to address the aims of the research, particularly in relation to informing the scaling up of PAX GBG. The questions were open-ended to facilitate qualitative responses and aimed to determine:

- Relevance of PAX GBG to their students and to themselves as teachers in their practice

- Perceptions of support in adopting and implementing the programme

- Whether implementation encourages other teachers and principals to adopt PAX GBG

- Factors that might make it difficult for teachers and/or school principals to adopt

- Differences between PAX GBG and other programmes that teachers are engaged in

- Recommendations for teachers who will implement in the future

The principal interview was created by a school principal and PAXIS Institute. This instrument collected demographic information of the principals as well as the students they serve. This interview also collected the principals' thoughts regarding:

- Initial considerations and reservations about having PAX GBG delivered in their school

- Experiences with the PAX GBG training and delivery

- Impacts of the programme in comparison with other strategies

- Intentions for future use

- Whether they would recommend it to other principals

- Advice they would offer to help scale up PAX GBG

Data Analysis:

A content analysis was undertaken with the assistance of the qualitative data analysis package, NVIVO 11, and Microsoft Excel. All data remained traceable to its source throughout its coding. In addition, dated versions of the file were stored and retained individually throughout coding. Separate frameworks were established for the interview with the principals and the questionnaire for the teachers. The coding framework was further developed by individually coding principal and teacher feedback and sorting them within the framework. The final framework resulted in four essential themes for both principals and teachers including: starting up, implementation, impact and recommendations/advice. For this study, the researchers who analyzed the data and developed the themes and framework for the interview and questionnaire responses took careful measure to abstain completely from the training and coaching of the intervention.

Procedures:

The teacher questionnaire was distributed to the 120 teachers who had been trained in PAX GBG. This questionnaire was included in an email to the teachers that served as the informed consent letter. Reminders for the option to take part in the anonymous research study throughout a two-week window were sent by email as well. The final sample resulted in 63 of the 120 target sample teachers volunteering to take part by responding to the questionnaire.

The school principal interviews were established through an email that served as the informed consent letter. These interviews took place over the phone in a time frame consistent with the teacher questionnaire research. The phone interviews were recorded with permission, and notes were taken by the researcher as well. The final sample resulted in five of the nine target sample principals volunteering to take part by engaging in the phone call interviews.

FINDINGS:

Principal Findings:

In the summer of 2016, five school principals with teachers newly implementing PAX GBG were interviewed according to the procedures listed in the methodology. The five principals represented diverse implementations across the Midlands and Dublin. Among these five schools, all but one had populations less under 300 students. The qualitative data was divided into three central themes: start-up, implementation, and impact. Principals also provided recommendations for future implementations as well.

Start up. Start-up for principals included attending the daylong PAX GBG training along with the teachers from their school. During the interview, principals identified initial preferences and concerns. This includes the categories of What sold it? and Initial concerns. Figure 1 shows a graphical representation of those two Start Up categories and their related themes.
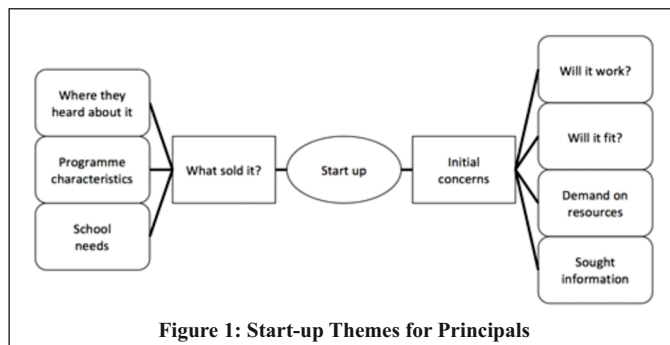

Figure 1: Start-up Themes for Principals

What sold it?

Where they heard about it. Principals reported that their time with Dr. Embry and subsequent experience verifying research and outcomes played a major role in their adoption of the programme. For example, "I was very impressed by the psychology behind it, the evidence base and the research."

Programme characteristics. Principals reported that utilizing the ongoing support for a programme that improves student self-regulation would be beneficial for the teachers, school, and children. One respondent noted, "There was support and that's what really appealed to me."

School needs. Principals reported that increasing support for discipline was necessary due to the changing demographics and make-up of the surrounding communities. Multiple principals proposed PAX GBG as a programme to support teachers with increasing behavioural needs. One principal identified, "A number of difficulties with a lot of our children coming through."

Initial concerns:

Will it work? Principals noted initial concerns regarding how well PAX GBG would work with students with varying abilities. Several noted a desire to support their teachers who had students with intense needs. Regarding the children and classrooms they saw in videos and demonstrations of PAX GBG, one principal wanted to know, "What ability they had or did it matter."

Will it fit? Principals were concerned whether PAX GBG would fit into existing behavioural and academic programs. One principal wanted to ensure, "It fit in with any other programme in the school."

Demand on resources. Nearly all respondents demonstrated concerns about the potential demand that implementing a programme such as PAX GBG would place on existing resources. One principal inquired, "Did it take up a lot of teachers' time? Did it need a lot of planning? Did it need a lot of resources?"

Sought information. Principals also had questions about obtaining additional information that pertained to their particular schools or implementations. These principals worked with the PAX Mentors and the developer, Dr. Dennis Embry, to address these concerns. One principal noted, "First of all I wanted to see did all teachers need to be trained in it, and the answer was 'no.' It can actually stand alone in a classroom."

Implementation:

The Implementation experiences included all the procedures once the principals decided to bring PAX GBG into their schools. This includes the categories of PAX training, Adoption, Support and Experience of delivery. Figure 2 shows a graphical representation of those four categories and their corresponding themes.
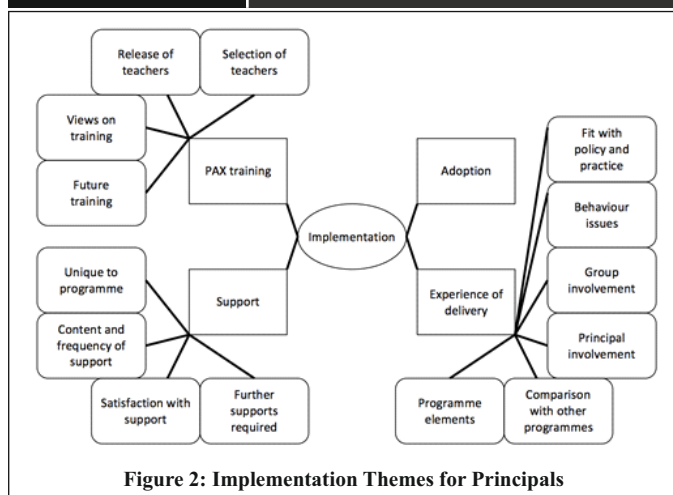
Figure 2: Implementation Themes for Principals

PAX training.

Selection of teachers. Selecting teachers for training was left to the principals; as not all teachers were trained initially. Principals reported similar methods for selection including identifying those who needed additional support and those who may likely engage with the programme. One principal noted the enthusiasm in the teachers selected, "Every single one of our teachers who were trained in it came back just jumping to get started."

Release of teachers. This initiative included some support funding to offset the cost of teachers missing two days of instruction to attend the training. However, this funding did not cover all the costs and required creative collaboration on the part of each staff to cover for the missing teachers. Despite this, principals all noted that the sacrifice was well worth the benefits.

Views on training. Principals noted the satisfaction and enthusiasm their teachers expressed regarding the training. Each principal noted the practicality of the lessons and strategies given during training as well as receiving all the tangible items they would need for implementation. One principal reported, "It was all practical. They were given a practical plan… and when they did come back they were enthused. They were really anxious to try it… and I think the enthusiasm of the teachers that the teachers passed on, it did pass on to the children."

Future training. Principals' thoughts on future training centered on developing mechanisms to train the remainder of their staffs. They also expressed a desire for formal professional development for those already trained. Thoughts on training also included a desire to collaborate in learning communities regarding PAX GBG implementation. One principal noted, "If there is some way that we can support one another and learn from one another… That's a discussion that we're really going to have to have now in September."

Adoption:

Principals found that both teachers and children took to PAX GBG readily and began to show results quite quickly. They did identify some instances where children took a bit more time to adjust. One principal felt it was easier in a school where there is already a positive environment. One principal identified time and resources needed to prepare to deliver the programme as a potential barrier to adoption. All principals felt that their staff had successfully adopted the programme. One principal reported, "The two teachers who are using the programme are incredibly hard-workers, and they demonstrated very, very quickly how effective it would be. Within about 3 weeks the effect was evident."

Experience of delivery:

Fit with policy and practice. Principals were happy that the programme fit into the policy and practice of the school without manipulation. They felt it gave the teacher tools to carry out the behaviour policies that were already in place. One principal noted, "We have a behaviour policy and it fits with our policy."

Behaviour issues. All principals found that the clear expectations in PAX GBG provided students with knowledge of exactly what was and what was not expected from them. Principals attributed these expectations to the increase in self-regulation that led to a reduction in behaviour issues. Several principals noted a distinct decrease in the need for detention, principal referral or other penalties. One principal reported, "When I walk into it now, it is a quiet place and a happy learning place."

Group improvement. Principals noted an increased sense of collective responsibility of the students to work together to improve behaviour and meet stated expectations. This included improved relationships, kindness, and ability to work together in groups. One principal reported, "They also feel they owe something to the rest of the class or the rest of the group in which they are working – to behave well."

Principal involvement. Principals found that PAX GBG classrooms fostered hard work and co-operation upon announced and unannounced visits. They reported a great deal of focus and concentration in every PAX GBG classroom. They also expressed concern about replacement teachers or pre-service teachers delaying the implementation or disrupting the progress the children had made. This highlights a need for expanded or school-wide training. One principal remarked, "I couldn't be more enthusiastic about it…for us, it has really worked."

Programme elements. Principals were very happy with the positive programme elements of PAX GBG. They often mentioned Tootles as written reminders of a job well done that could be shared with the principal. They also appreciated that the rewards were fun things that children naturally like to do and not material rewards. They also identified how many elements can be generalized outside the classroom. One principal reported, "Just one little blow on the harmonica, and you just tell them whatever you want them to do for the next couple of minutes. That's it. There wouldn't be a sound."

Comparison with other programmes. Principals found PAX GBG simple to implement compared to other programs and reported a greater sense of enthusiasm from their teachers. Principals also liked that PAX GBG did not single out students for reward or punishment, but instead, rewarded groups or the whole class. Principals reiterated their happiness with the non-material rewards, which the children seem to overwhelmingly enjoy. One principal noted, "All the rewards were intrinsic. It didn't cost anything to provide rewards…so it was very, very easy to manage the whole programme."

Support:

Unique to programme. Principals appreciated the ongoing support that the PAX mentors provided throughout the school year as opposed to a one-time training only. One principal noted the encouragement that came from knowing, "Someone was going to come in and follow it up."

Content and frequency of support. Principals reported that the mentors visited frequently enough to gauge progress in the teachers' implementations and offer appropriate feedback. One principal reported, "With any new system you have, you need support, and I would consider the four visits perfect."

Satisfaction with support. Principals and teachers both reported their satisfaction with the ongoing support provided by the PAX mentors. This support gave teachers the confidence to implement their new strategies with the knowledge that they would receive ongoing feedback. One principal noted one teacher's appreciation that "For them to be able to reflect with her, that was very valuable."

Further supports required. Principals noted concern about teachers who may need additional support in the future. This could come from additional visits from the PAX mentors or follow-up development training. One principal noted, "It would be nice if PAX was established in the school that there would be some shared visitation on an ongoing basis."

Impact of programme:

The impacts include all the short-term and long-term effects that the principals noted from having PAX GBG implementations in their school. These effects are comprised of the noticeable spread of PAX GBG components after implementation as well as the impact on children, teachers, and the principals. These effects translate to four categories with related themes. Figure 3 shows a graphical representation of those four categories and their corresponding themes.
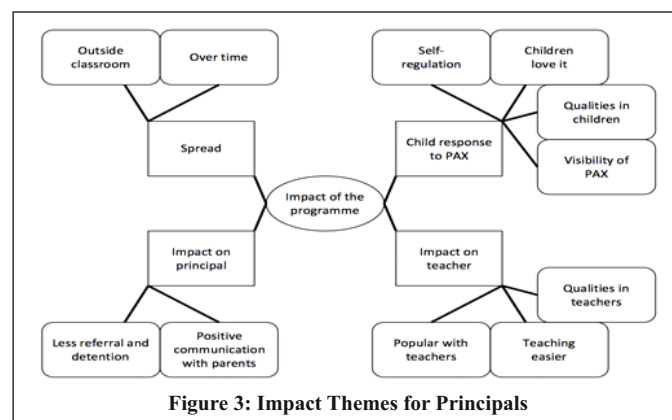

Figure 3: Impact Themes for Principals

Child response to PAX:

Self-regulation. Principals noted an anecdotal increase in children's ability to self-regulate after spending time in a PAX GBG classroom. This included making better decisions and being more co-operative with teachers and with each other. One principal noted, "It brings more order. The kids, generally, are a bit more self-contained."

Children love it. Principals found that in addition to regulating themselves more effectively, children enjoyed having the programme in school. The strategies

seemed to bring a sense of order, comfort, and enjoyment. One principal reported, "They engage willingly… and they like these Granny's Wacky Prizes."

Qualities in children. Principals appreciated the increased accountability and co-operation that the children demonstrated. They also seemed to demonstrate a sense of resilience at a younger age after spending time in the programme. One principal noted, "It establishes a kind of collective responsibility within a group… it helps them take responsibility for themselves and others."

Visibility of PAX. Another impact that principals noted was the visibility of PAX GBG components and principles traveling outside the classroom. These aspects and their very visible effects also stirred interest from the rest of the staff. One principal noted, "It's not just the behaviour, but to get them back on task… it's just instant."

Impact on principal:
Less referral and detention. Principals noted a specific quantitative decrease in the number of school detentions and office referrals for behavioural infractions. The improvement in children's behaviour as well as increased teacher and child strategies from PAX GBG for sorting out conflict created a vastly improved school and classroom atmosphere. One principal noted, "It would be a rare day when you wouldn't have eight or ten who were in detention, and I would say, we haven't had ten in the whole year [after implementing PAX GBG].

Positive communication with parents. Principals found a shift in communication with parents after the programme was in place. Due to an overall improvement in school behaviour as well as scripted strategies for reporting positive news home, relationships between the school and parents have improved as well. One principal remarked, "I do know that parents are walking into the school with greater confidence to those classrooms, because they are not apprehensive about receiving a complaint."

Impact on teachers:
Popular with teachers. The principals found their teachers exhibited a sustained enthusiasm for the programme after implementing. Although principals found that increased support could have embedded the program further in the school. One principal noted, "They went with an open mind, but I was actually surprised at how much they bought into it and continued to use it."

Teaching easier. The principals found that the programme had improved their teachers' performance by decreasing all the behavourial issues they formerly dealt with. This allowed more attention and focus on the children's academics. One principal noted, "Other teachers are also happy because… they had to take the children [with behavioural issues] into their class for instance, and that hasn't happened since the program has been engaged."

Qualities in teachers. Principals noted how implementing PAX GBG improved their teachers efficacy in all areas. By having strategies for not only improving student behaviour, but also dealing with the problems that do arise, the teachers can handle a lot more on their own. One principal noted, "I can see the confidence growing in one teacher – much happier."

Spread:
Over time. Principals were impressed that the teachers were clearly implementing the programme long after the initial training. These effects continued throughout the school year. One principal remarked, "Virtually no issues have arrived at my office from the teachers who took part in the process."

Outside classroom. Principals noticed that the programme had spread outside the classroom based on the decreased behavioural infractions and seeing teachers utilize their strategies. This was evident in teachers' use of harmonicas in common areas to get students' attention and by sharing the Tootle Notes with the principal. One principal noted, "The teacher will give a little twinkle on the harmonica and then silence."

Teacher Findings:
The teacher findings were based on the 63 respondents of the 120 target respondents to the teacher questionnaire. Of those 63 respondents, 89% identified as female and 11% identified as male. Most of the respondents fell into the 26 to 35-year-old age range. Table 1 below shows the age distribution of the teacher respondents at the time of training.

Table 1: Age of teacher respondents

Age range	N	%
25 or younger	7	11.1
26 to 35	35	55.6
36 to 45	16	25.4
46 to 55	3	4.8
56 or older	2	3.2

The teacher respondents recorded varied teaching experience before beginning the programme. Table 2 shows the distribution of years of experience of the teacher respondents at the time of training.

Table 2: Experience of teacher respondents

Years of experience	N	%
0 to 5	17	27
6 to 10	21	33.3
11 to 15	15	23.8
16 to 20	4	6.3
More than 25	6	9.6

The qualitative data compiled from the teacher questionnaire resulted in two central themes: Start-up and Implementation. Start-up consisted of reasons that the teachers opted into the training and initiative, and Implementation consisted of their experiences adopting and delivering the programme in their classrooms as well as challenges and supports that revealed themselves throughout their implementation.

Start-up:
Start-up included attending a daylong training in PAX GBG and then working with a PAX Mentor to integrate the new strategies and procedures into their classrooms throughout the school year. In response to the questionnaire, respondents detailed the reasons they elected to learn the program and the reservations they experienced. This includes the categories of Reasons trained and Initial reservations. Figure 4 shows a graphical representation of those two categories and their corresponding themes.
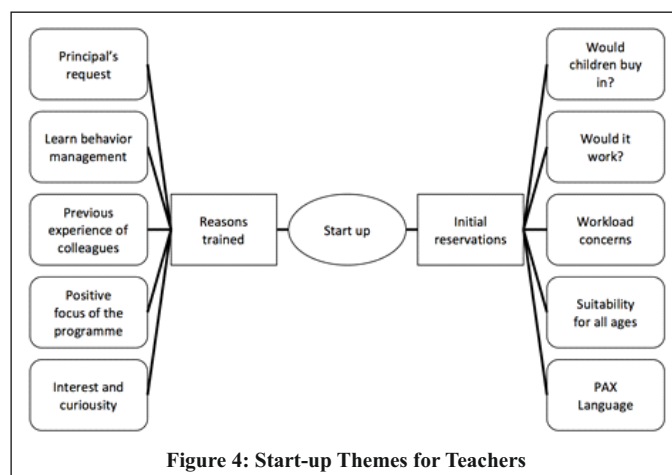

Figure 4: Start-up Themes for Teachers

Reasons trained:
Principal's request. Many respondents identified their reason for training in PAX GBG as coming from an invitation from their principal. Enrollment in the training and initiating the programme in the classroom was voluntary, but principals made the opportunity to take part in the funded initiative and subsequent research project known and available to all faculty.

Learn behaviour management. Many teachers detailed their lack of skills or strategies for working with children with behaviour problems. Responses included, "I had a particularly tough class this year and needed something to improve behaviour and reduce off task behaviours," and "I trained because I found I was losing my voice from repeating instructions many times and then having to shout at a few children. I was exhausted from the repeated misbehaviour"

Previous experience of colleagues. Several teachers had peers and colleagues who had already been trained in PAX GBG. This positively influenced many respondents to participate. For example, "I saw the positive influence it had on other classes with the teachers trained in PAX. I was interested in the influence it would have on my current class."

Positive focus of the programme. Teachers often referenced the fact that the programme focuses on the positive as well as attribution of necessary skillsets. One teacher noted, "It focuses on promoting positive behaviour rather than punishment of negative."

Interest and curiousity. Many respondents noted a desire to expand professionally. For example, "I thought it sounded interesting and always am open to new things. Like all teachers there was room for my classroom management to improve too."

Initial reservations:
Would children buy in? Many teachers were uncertain about how students would respond to specific aspects like the prizes or the harmonica. The teachers also wondered whether or not the boys, especially, would take it seriously enough to buy in and not sabotage the implementation. One teacher responded, "I was anx-

ious that they wouldn't buy into it. I wasn't convinced that they would be motivated by the games."

Would it work? Some respondents were concerned whether it would work across different classroom types and ability ranges. For example, "I was concerned as to whether it would work out like the example videos we had been shown, I was worried there were children that needed it most would not respond to it due to a bad attitude to school in general."

Workload concerns. Many teachers echoed the stress caused by additional educational mandates. Respondents worried that an addition programme in the classroom would take time away from their other responsibilities. One respondent noted that they were "Worried it was just another new initiative and would mean more work for me without results."

Suitability for all ages. Several teachers had concerns about how well the programme would work outside of the age ranges shown in demonstration videos. For example, "How it would work in the older classes; as the only classes in our school that [had] teachers trained was 1st and 2nd".

PAX language. Teachers had concerns about the new programme-specific language that they and the children would need to adopt in order to fully implement the programme. One teacher noted, "I was apprehensive of how the children would react to the new vocabulary."

Implementation:
Implementation experiences included the relative ease or difficulty in their adoption of the programme. This also included the teachers' experiences delivering the programme, the engagement of the children, the PAX GBG language, and adaptations that were made in implementation. Finally, teachers provided perspectives on support and any challenges experienced. This includes the categories of Adoption of programme, Delivering PAX GBG, Challenges, and Support. Figure 5 shows a graphical representation of those four categories and their corresponding themes.
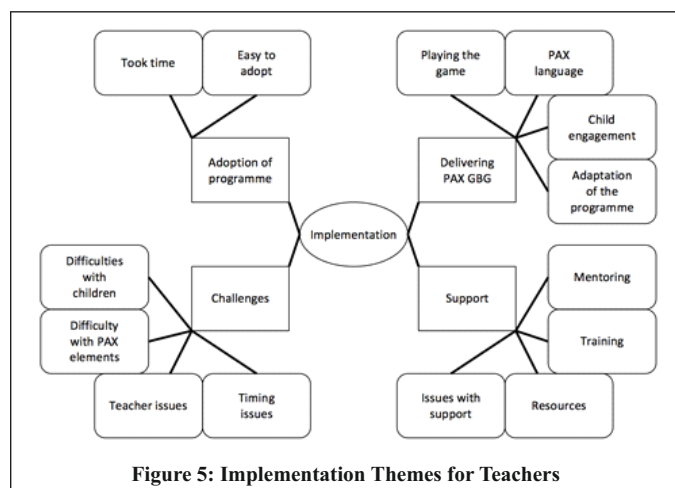

Figure 5: Implementation Themes for Teachers

Adoption of programme:
Took time. Some teachers already had established procedures took time to integrate the new strategies into their day. For example, one teacher noted, "Took a [while] to get my own head around how it works, but the children got it very quickly."

Easy to adopt. Most teachers were able to quickly and easily implement PAX GBG strategies into their classrooms right away. For example, "The children were very engaged from the start and I was very enthusiastic about it… The children learned how to play the game very quickly, and it became part of our daily routine very quickly."

Delivering PAX GBG:
Playing the game. Teachers reported improved behavioural outcomes once they began playing the game. They saw improvements in both the quantity and quality of work in the classroom, and they also reported greater self-regulation and control in the children. For example, "The games worked flawlessly into my day…The children self-regulated, and I got on with my task at hand."

PAX language. Though some teachers took a little time and overcoming apprehension, most teachers reported positive outcomes from using the specific language of PAX GBG. One teacher noted, "The class overall responded really well to PAX, and the positive language used with it ensured that no child was singled out for undesirable behaviour."

Child engagement. Teachers reported that the children immersed themselves into the programme and its procedures. For example, "The children loved it from the get-go. They find it extremely fair, and they practically run it themselves."

Adaptation of the programme. Some respondents reported that minor adaptations to the programme as it was trained were necessary. Some of these adaptations were for much younger students or students with educational delays. For older students, the rewards had to be altered. One teacher reported, "It was important in my class to take it slowly given the age (younger) of the children and needs in the class."

Support:
Mentoring. The teachers reported that the support was very positive and found these meetings motivating and encouraging. The mentors helped to solve any problems and generate new ideas. For example, "Extremely supportive and positive. Took an interest in the progress of both myself and the children. Reduced my stress levels dramatically by offering a non-judgmental ear."

Training. Teachers found the training very informative. Many also noted how motivating and enjoyable they found the training. Responses included, "Actually it was very easy to set up; as we were given a brilliant course and resources… I was highly motivated after doing course."

Resources. Respondents found that the resources provided were excellent and they had all the tools and guidance necessary to implement the programme after receiving the training. They found additional resources in the manual as well as professional collaboration with their peers who were implementing PAX GBG as well. One respondent noted, "The resource pack, handbook, and online support were invaluable in setting up PAX."

Issues with support. A few teachers mentioned issues with support that could have resulted in better outcomes. Other teachers had a desire for more structured group professional development regarding their progress with PAX. For example, "It was nice to have someone visit the classroom… but it was quite rushed as she was trying to see so many schools. I think it would have been helpful to have meetings with her and the other teachers for focused discussion/feedback."

Challenges:
Difficulties with children. Teachers stated that sometimes children who resisted negatively affected the experience for their classmates. Many times, these issues involved students with behavioural or educational needs that would require clinical support. One respondent noted, "There are always those one or two challenging students who are nearly there just not quite yet. However, I have this class again next year so I feel that they will benefit more from a second year of a PAX classroom."

Difficulty with PAX elements. The programme elements caused problems for some teachers and required individualized adjustment for their classrooms. Teachers needed time to adapt to using the PAX GBG reward system as opposed to their traditional incentives. This involved inventing new and age-appropriate prizes to keep their interest from waning. Letting the children suggest new prizes resolved this issue for several teachers. For example, "It's hard for some teachers to stop giving physical prizes but I found that the children value the non-material prizes just as much if not more."

Teacher issues. Implementing new procedures and strategies in the classroom required teachers to make adjustments to their own schedules and habits. These included allowing for sufficient time to get to all the elements while integrating them into their common practice. Most teachers did find that their implementation improved with experience and a marked effort toward consistent application. One teacher noted, "The greatest challenge was in making myself do it properly and give it proper time and not just lip service."

Timing issues. Time is an issue always vital to teachers. Some teachers faced challenges in regard to time. Most teachers reported that the programme took time out of their day at the very beginning of implementation while they and the students were still learning. Teachers also expressed an interest in beginning the programme at the start of the school year and not the calendar year. A teacher noted, "It takes time at the start to get the children used to it and to introduce it fully into the classroom, but after a couple of weeks it becomes part of a way of teaching. It does not take up any extra time during a lesson."

Impact of the programme:
Teacher perspectives on the impact of the programme generated categories related to how the program affected the children, the teacher, the classroom as a whole, as well as how the aspects of the program seem to spread. There was also evidence of the lasting effects of PAX GBG. For example, all of the teachers intended to continue to deliver it in the following academic year. This includes the categories of Spread, Impact on classroom, Impact on child, and Impact on teacher. Figure 6 shows a graphical representation of those four categories and their corresponding themes.

Figure 6: Impact Themes for Teachers
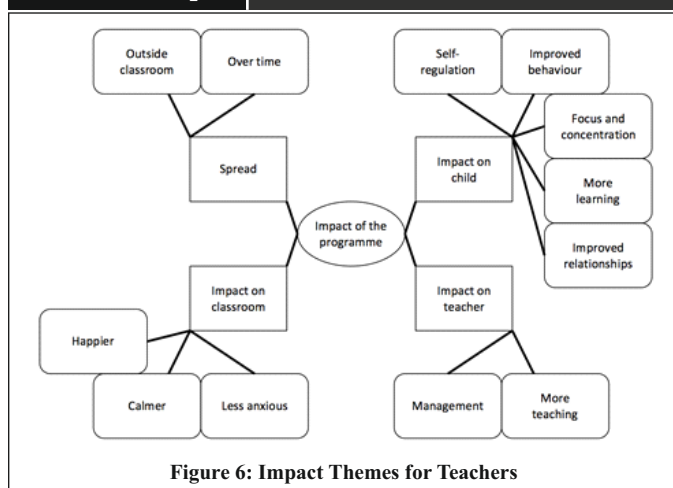
Impact on the child:

Self-regulation. Teachers reported an increase in their students' self-regulation. Children also learned to accept the disappointment of losing games without over-reacting. One teacher noted, "The self regulation and personal responsibility for own actions that evolves within the children is great."

Improved behaviour. Most teachers noted a distinct improvement in their students' behaviour. Most teachers also noted an increase in the pride or happiness displayed by students about their own academic and behavioural performance. For example, "We have so much fun and all the while incidences of misbehaviours have been reduced and standardized test scores have increased!"

Focus and concentration. Respondents found that students were quieter, yet there was more of a sense of fun. They also found that their students could stop what they were doing and pay attention to the teacher quickly, especially with the use of the harmonica. One respondent found, "When doing written work, it is so quiet, you can hear their pencils on the paper. It helps the more energetic children focus on doing their best work."

More learning. Teachers identified reduced behaviour issues and students able to spend more time on work and learning. For example, "We get more done and it's very systematic. It works! I'm happier, children [are] happier, and they have matured so much."

Improved relationships. Teachers found their students more likely to praise one another for good performance. One teacher noticed, "The children are using language such as having respect for each other and share positive comments about each other. Prior to this, children would only tell me about another pupil if they had done wrong."

Impact on the teacher:

Management. Most teachers noticed that the programme added to their skills of managing the classroom and behaviours. Teachers also found themselves seeing the positives and increasing these positive performances through recognition. They found the programme to have a marked impact on particularly energetic classes. One teacher noted, "Before I started PAX GBG, I couldn't wait to finish with the class I have. Now I am delighted to have requested them for next year. I am keeping them and will continue to use PAX GBG."

More teaching. Teachers found that with their students' increased ability to regulate and focus on their own, they were able to give more individual attention to students who needed more academic assistance. For example, "It has had a very positive impact in my class it allows the children to work independently and allows me to give extra time to those who may need it."

Impact on the classroom:

Happier. Many teachers noticed that their children were happier when the programme was fully implemented. This was found in their treatment of each other as well as the relationship with the teacher. For example, "Children are much happier, content, positive and diligent. They are more motivated and encouraging towards each other."

Calmer. Respondents repeatedly noted having a calmer classroom after implementing. One teacher noted, "[PAX GBG] adds an element of fun into the school day, has quieted down noise levels in the class, and has created a calmer, nicer environment to be in for both kids and teacher!"

Less anxious. Teachers noted that the nurturing environment is especially important for children with identified or unidentified trauma or anxiety that may require clinical assistance. By reducing anxious episodes for these children, they can remain in the classroom longer and increase their academic progress. One teacher found, "Anxious children were happier and less anxious. The quiet time during the game was much needed by all – children became much calmer."

Spread:

Outside the classroom. Many teachers looked to generalize the PAX GBG elements and their corresponding skills to other areas than the classroom. For example, "[I] brought my PAX harmonica on school tours and got envious looks off other teachers as my class all stopped for PAX quiet!"

Over time. Some teachers noted that the impact of some programme elements seem to wane after the novelty had worn off. However, many teachers identified individualized classroom adjustments that kept the students engaged. One respondent commented, "The children are still enjoying the PAX programme and are fully committed to winning a prize from Granny's Wacky Prize Bag."

DISCUSSION:

The qualitative findings demonstrate that PAX GBG as implemented in the midlands and Dublin, Ireland was viewed by teachers, principals and pupils as acceptable, adoptable, appropriate, feasible, and highly valued. This research also demonstrates that implementation of PAX GBG has positive self-reported benefits for teachers and school principals. However, it is also clear that PAX GBG needs to be practiced with consistency in order to generate positive outcomes. Also, teachers implementing PAX GBG need support from various sources including, adequate training, time to implement, feedback from a mentor, opportunities for professional development, and more. This allows teachers to draw on their own skills and expertise to shape how they use PAX GBG in order to match an ever-changing classroom culture.

Classroom outcomes can be optimised when teachers and principals use PAX GBG as an evolving practice for which they take ownership and implement with cultural competence. The expertise, consistency, and skills of the classroom teachers help PAX GBG to evolve from a collection of proven strategies to a sustainable teaching practice. The mentoring sessions assist teachers in incorporating the strategies into their own style of teaching. Teachers and principals identified on-going support for the teachers and the importance of making PAX GBG accessible to all students and teachers as important concerns. Based on the findings, the following measures are in place for the future.

1. Scaling up requires multiple training routes for teachers. In the future, this could include integrating PAX GBG instruction into the Department of Education and Skills sanctioned summer teaching course. This may also include integrating PAX GBG instruction into pre-service teacher training.

2. Schools need help sustaining implementation and outcomes with PAX GBG. This includes providing PAX GBG mentor training to external supporters who will assist immediately after training. This also includes providing PAX GBG mentor training to selected internal staff members as well. These staff members will help mentor and collaborate with teachers to troubleshoot their PAX GBG implementation.

When this qualitative research is combined with the large quantitative evidence base and the return on investment research, there is a clear argument for a scaling up of PAX GBG in terms of implementation outcomes, service level outcomes, and client outcomes. Utilizing the qualitative findings to refine the policies and procedures for culturally competent initiation of PAX GBG will ensure a successful population-level implementation and corresponding improvement in lifetime outcomes for the youth of Ireland in the very near future.

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